## Table 1. CPG proposed exposure area/dataset definitions for revised BERA wildlife EPCs

| Focal Species | Exposure Area | | | Conducted in 2014 BERA? | Required for Revised BERA | Supporting documentation/Notes |
|---|---|---|---|---|---|---|
| | Prey | Sediment | Surface Water | | | |
| Spotted Sandpiper | Site-wide | Site-wide mudflats | > RM 8 | Yes | Yes | Sediments deeper than mudflat areas do not represent potential shorebird foraging areas; spotted sandpiper require exposed areas (e.g., mudflats or sandbars) with firm, fine grained (e.g., silt or sand) sediment for feeding (Oring et al. 1997); these habitats found throughout the LPRSA during the avian surveys (Windward 2011, [in prep]; BBL 2002). Although they have a lower preference for areas near human activity, their habitat is generally not limited by land use or shoreline features (Windward 2011, [in prep]). |
| | Mudflats by reach | Mudflats by reach | > RM 8 | Yes (uncertainty) | **Yes*** | 2-mile exposure area may represent appropriate scale for foraging during breeding (Oring et al. 1997). |
| | Individual mudflats | Individual mudflats | > RM 8 | No | **Yes** | **Individual mudflats and mudflats by zone are required to provide the risk manager with information on smaller zones to facilitate evaluating remedial options. The uncertainty section could discuss the biological relevance of restricting foraging ranges to areas that may be smaller than optimal for the species, although this should be tempered by the realization that the focal species is a representative of the feeding guild being evaluated and other species may have smaller foraging ranges.** |
| | Mudflats by zone | Mudflats by zone | > RM 8 | No | **Yes** | |
| Great Blue Heron | Site-wide | Site-wide mudflats | > RM 8 | Yes | Yes | Great blue heron found throughout the LPRSA during the avian surveys (Windward 2011, [in prep]; BBL 2002), and they showed no preference among fresh, brackish, or saltwater habitats (Kushlan 1978; Willard 1977; Chapman and Howard 1984). Sediments deeper than mudflat areas do not represent potential heron foraging areas; heron generally require shallow water for hunting for prey. Fish prey may forage outside of mudflat areas. |
| | Zone | Mudflats by zone | > RM 8 | No | **Yes*** | Smaller than site-wide exposures may be appropriate for individual heron; median distance traveled by great blue herons to foraging sites to be 12 km (approximately 7.5 miles) (Henning et al. 1999), although focus of ERA is to populations, not individuals. Fish prey may forage outside of mudflat areas. |

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| | Individual mudflats | Individual mudflats | > RM 8 | No | **Yes** | **Individual mudflats and mudflats by zone are required to provide the risk manager with information on smaller zones to facilitate evaluating remedial options. The uncertainty section could discuss the biological relevance of restricting foraging ranges to areas that may be smaller than optimal for the species, although this should be tempered by the realization that the focal species is a representative of the feeding guild being evaluated and other species may have smaller foraging ranges.** |
| Belted Kingfisher | > RM 6 | > RM 6 | > RM 8 | Yes | Yes | In general, belted kingfisher breeding habitat was found to be limited in the lower 6 mi of the Passaic River (Baron 2011); areas above the lower 6 mi have suitable habitat and may support breeding pairs (Ludwig et al. 2010). Fish and crabs may forage outside of mudflat areas, so not limited to mudflats only. |
| | Site-wide | Site-wide | > RM 8 | No | Yes | **The entire site is required as an exposure area to provide the risk manager with information to facilitate evaluating remedial options. The uncertainty section could discuss the biological relevance of expanding the foraging range to areas that may not adhere to habitat preferred by the species, although this should be tempered by the realization that the focal species is a representative of the feeding guild being evaluated and other species may have different foraging ranges.** |
| | Individual mudflats > RM 6 | Individual mudflats > RM 6 | > RM 8 | No | Yes | **Individual mudflats and mudflats by zone are required to provide the risk manager with information on smaller zones to facilitate evaluating remedial options. The uncertainty section could discuss the biological relevance of restricting foraging ranges to areas that may be smaller than optimal for the species, although this should be tempered by the realization that the focal species is a representative of the feeding guild being evaluated and other species may have smaller foraging ranges.** |
| Mink | > RM 10 (SFF); Site-wide (non SFF) | > RM 10 | > RM10 | Yes | Yes | Mink are generally limited to natural shorelines with access to water (Allen 1986) and will dive for prey at depths of less than 10 ft (Harrington et al. 2012; Hays et al. 2007). Mink prefer areas with dense riparian or shrub-scrub vegetation with canopy and tend to avoid areas near human activity or limited vegetation, including areas of residential/recreational land use (Allen 1986; USEPA 2002b). This suggests that mink are more likely to be restricted to the least disturbed/developed portions of the LPRSA (i.e., from about RM 10 and upstream). |
| | Site-wide | Site-wide | > RM 8 | Yes (uncertainty) | **Yes*** | Site-wide considers the potential use below RM 10, although this is unlikely based on the habitat present. Potential fish prey and crabs may forage outside of mudflat areas. |

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|---|---|---|---|---|---|---|
| River otter | Site-wide | Site-wide | > RM 8 | Yes | Yes | River otter can have large home ranges up to 22.5 km long (Spinola et al. 1999) and feed on larger fish that are not restricted to one portion of the LPRSA. River otter feed in deep water as well as shallow water (USEPA 2003; Cote et al. 2008). |
| | > RM 10 (SFF); Site-wide (non SFF) | > RM 10 | > RM 8 | Yes (uncertainty) | **Yes*** | The literature indicates that river otter will generally not use areas with human activity, including areas of residential and recreational land use (Boyle 2006; USEPA 2003; Melquist and Hornocker 1983). |

*** Additionally, the calculations and discussions marked with an * should be included in the risk characterization section. The biological relevance of the exposure estimates can be discussed in the uncertainty section.**